IMPROVED VISES.

Several illustrations are given on this page of the strong and finely finished small vises made under the Colton patents by the Moore & Barnes Manufacturing Co. at Phoenix, N. Y., to which place their factory has lately been removed from Syracuse. The form of these vises admits of nearly every operation being done to gauge by means of jigs and special machinery, which insures accuracy. The sliding bar is ground to size, and the hole in the vise body is reamed, thus making a perfect fit. As a result, they are, it is claimed, as thoroughly well made and fitted as any of the larger and more expensive vises of other makes. All the sizes are handsomely proportioned and present a mechanical appearance. The jaws are evenly jointed, and, together with the anvil and horn, nicely ground and polished, and the body japanned. The screws and levers are all made of bright Bessemer steel. The vises are of unusual weight, and the metal is distributed where it is needed to insure the greatest strength. In other low priced vises, the back jaw is movable, thus bringing all the jar and pound directly on the screw; and again, the screw, being always exposed, catches all the filings and dirt, which, adhering and running through the nut, cuts and wears, and if much used the vise soon becomes worthless. In the vises here illustrated these serious defects are entirely overcome. The front jaw being the movable one, all the pound and jar comes on the strong and solid back jaw, thus holding the work tight and solid and relieving the screw. The sliding bar, moreover, covers the screw at all times, protecting it from filings, chips and injury. Each vise is carefully inspected before packing, and warranted perfect; and the makers are confident that in construction, finish, strength and durability, as well as in moderate cost, these vises may safely challenge comparison with any in the market. The fact that over sixty thousand have thus far been sold is a forcible proof of their conspicuous merit.

In the illustrations, Fig. 1 represents the No. 3 anvil vise, with two-inch jaws; it opens 2¼ inches and weighs 4 lbs. The jaws and anvil are chill hardened. In Fig. 2 is shown the No. 20 swivel base vise, weight 10 lbs., with 2½ inch steel jaws, checked and tempered, and anvil face chilled hard. It is provided with a swivel base and bench ring, together with ½ inch bolt, wing nut and washer, and is designed especially for jewelers' and mechanics' use. Fig. 3 shows the No. 2½ clamp vise with anvil. It is made with 1½ inch jaws, opens 1¾ inches, and weighs $1\frac{5}{16}$ lbs. The thumbscrew is provided with ball and socket swivel cap. Fig. 4 represents a case assortment of these vises for the retail trade, displayed on a neat counter stand. An important feature of the clamp vises, which is covered by patents, consists in widening the clamp at its junction with the body of the vise and providing the same with two countersunk screw-holes, so that in case the clamp is ever broken the vise can be secured to the bench by screws, in the same manner as the anvil vises.

The Moore & Barnes Manufacturing Co., by whom these vises are made, have their salesroom and office at 103 Chambers Street, New York.

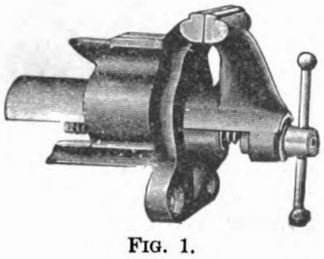

FIG. 1.

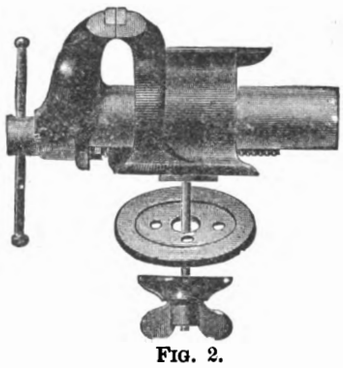

FIG. 2.

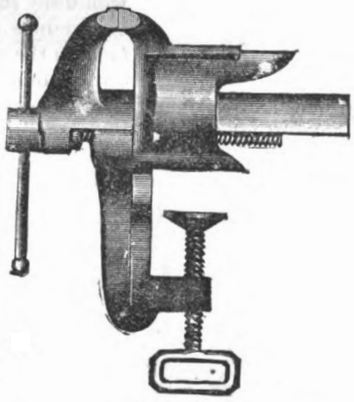

FIG. 3.

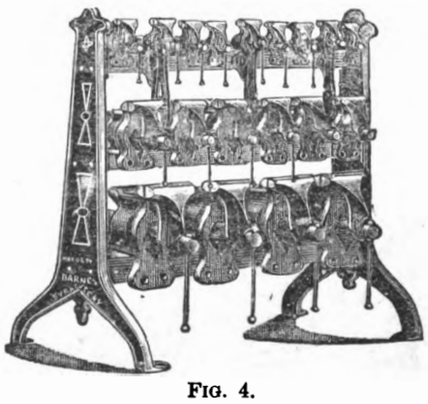

FIG. 4.

SMALL VISES—COLTON'S PATENTS.